SANITARY SEWER GENERAL NOTES

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND SUPPLEMENTS THERETO, AS WRITTEN AND PROMULGATED BY PUBLIC WORKS STANDARDS, INC., HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS, THE TORRANCE STANDARDS, AND TO THE SATISFACTION OF THE COMMUNITY DEVELOPMENT OR PUBLIC WORKS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE. VERIFY DEPTH AND PROTECT ALL STRUCTURES, INCLUDING SUBSTRUCTURES, SHOWN ON THE PLAN. THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF REPAIRING OR REPLACING ANY OF SAID STRUCTURES DAMAGED BY HIM/HER DURING PROSECUTION OF THE WORK. ALL REPAIRS AND REPLACEMENTS SHALL BE DONE IN THE PRESENCE OF THE INSPECTOR. ALL LOCATIONS SHOWN ON THE PLAN FOR UTILITY LINES HAVE BEEN TAKEN FROM AVAILABLE RECORDS AND THEIR COMPLETENESS AND CORRECTNESS ARE IN NO WAY GUARANTEED.

3. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 AND ALL PUBLIC UTILITY COMPANIES AND OWNERS OF PRIVATE FACILITIES WITHIN THE AREA OF CONSTRUCTION AT LEAST 2 WORKING DAYS IN ADVANCE OF PERFORMING ANY WORK WITHIN SAID AREA.

4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY BEFORE COMMENCING WORK. THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS STAMPED AND SIGNED BY A TRAFFIC ENGINEER. TRAFFIC CONTROL WITHIN PUBLIC STREET RIGHTS OF WAY SHALL BE IN CONFORMANCE WITH CITY STANDARDS AND/OR THE "CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD CALIFORNIA SUPPLEMENT MANUAL)" LATEST EDITION. THE CONTRACTOR SHALL PROVIDE A 24-HOUR TELEPHONE NUMBER FOR EMERGENCY REPAIRS TO TRAFFIC CONTROL AND PAVEMENT MARKINGS.

5. OVERHEAD UTILITY LINE CAUTION: REVIEW APPROVED CONSTRUCTION PLAN. IF CONSTRUCTION REQUIRES WORKERS AND/OR EQUIPMENT TO BE WITHIN 6 FEET OR CRANES OR HOISTING DEVICES TO BE WITHIN 10 FEET OF OVERHEAD ELECTRIC/UTILITY LINES, CALL SOUTHERN CALIFORNIA EDISON CO. AT 310-783-9336.

6. PRIOR TO COMMENCEMENT OF WORK, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND TIED OUT. ALL CENTERLINE MONUMENTS OR TIES LOST OR DESTROYED BY THIS WORK SHALL BE REPLACED EITHER BY A LICENSED SURVEYOR OR A CIVIL ENGINEER REGISTERED PRIOR TO JANUARY 1, 1982 AND NEW TIE SHEETS PROVIDED. METHOD OF ESTABLISHMENT SHALL BE STATED ON THE TIE SHEET.

7. GRADE SHEETS PREPARED AND STAMPED BY A LICENSED ENGINEER OR SURVEYOR SHALL BE DELIVERED TO THE INSPECTOR 24 HRS PRIOR TO COMMENCEMENT OF WORK.

8. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT 310-781-6900 PRIOR TO TRIMMING, REMOVING OR RELOCATING ANY EXISTING STREET TREES.

9. UNLESS OTHERWISE SHOWN, ALL TRAFFIC SIGNS SHALL BE RELOCATED OR REMOVED BY THE CONTRACTOR.

10. EXISTING DOWNSTREAM MANHOLES SHALL BE BULKHEADED WITH BRICK AND MORTAR OR PLUGS APPROVED BY THE INSPECTOR AT NEW INLET DURING CONSTRUCTION OF NEW UPSTREAM LINES. BRICK AND MORTAR OR PLUG SHALL BE REMOVED IN THE PRESENCE OF THE INSPECTOR(S) DURING CLEANING OF THE FIRST UPSTREAM SECTION OF THE NEW SYSTEM.

11. TRENCHES CUT INTO AN EXISTING ROADWAY WITHIN THE PUBLIC RIGHT OF WAY SHALL BE BACKFILLED AND PAVED AS PER TORRANCE

12. TRENCH RESURFACING SHALL BE OF THE SAME TYPE AS THE EXISTING PAVEMENT PLUS ONE INCH, EXCEPT IF EXISTING PAVEMENT IS A.C. OVER P.C.C., RESURFACING MAY BE FULL-DEPTH A.C.

13. MANHOLE COVER SHALL BE CAST WITH THE WORDS "TORRANCE SEWER" FOR CITY MAINTAINED LINES AND "PRIVATE SEWER" FOR PRIVATELY MAINTAINED LINES.

14. ALL SEWER LINES CONSTRUCTED TO PUBLIC STANDARDS SHALL BE VITRIFIED CLAY PIPE (VCP). PVC MAY BE USED SUBJECT TO PRIOR WRITTEN APPROVAL FROM THE PUBLIC WORKS DIRECTOR. ALL HOUSE CONNECTION LATERALS SHALL BE MINIMUM 6 INCH DIAMETER.

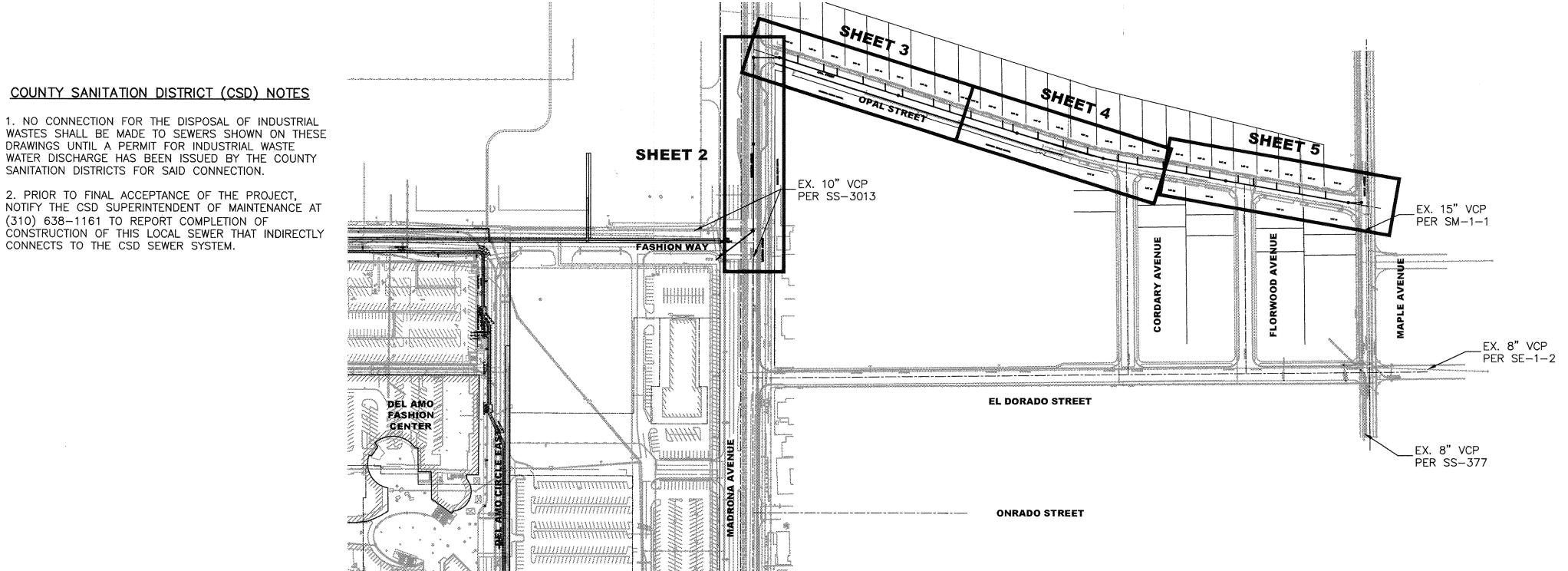
15. CONTRACTOR SHALL SET ALL MANHOLE FRAMES AND COVERS TO FINISHED GRADE.

16. CONCRETE ENCASEMENT SHALL BE REQUIRED FOR SEWER MAIN LINE AND HOUSE LATERALS WITH LESS THAN 3 FEET OF COVER.

17. THE CONTRACTOR SHALL MAKE AVAILABLE FOR THE INSPECTOR'S REVIEW, ON A DAILY BASIS, AS-BUILT DRAWINGS FOR WORK PERFORMED UP TO AND INCLUDING THE PREVIOUS DAY'S ACTIVITIES. WORK SHALL NOT BE CONSIDERED AS COMPLETE UNTIL AS-BUILT DRAWINGS ARE SUBMITTED TO AND ACCEPTED BY THE COMMUNITY DEVELOPMENT/PUBLIC WORKS DIRECTOR.

OPAL STREET SEWER PROJECT

MADRONA AVENUE BETWEEN FASHION WAY AND OPAL STREET OPAL STREET BETWEEN MADRONA AVENUE AND MAPLE AVENUE



SONOMA STREET

ANTONIO STREET

CARSON STREET

STANDARD DRAWINGS

COUNTY SANITATION DISTRICT (CSD) NOTES

DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTE

2. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT,

SANITATION DISTRICTS FOR SAID CONNECTION

(310) 638-1161 TO REPORT COMPLETION OF

CONNECTS TO THE CSD SEWER SYSTEM.

WATER DISCHARGE HAS BEEN ISSUED BY THE COUNTY

. NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL

CITY OF TORRANCE

TRENCH BACKFILL & PAVEMENT REPAIRS T200 SANITARY SEWER GENERAL NOTES

BEDDING FOR SEWER PIPE T206 SEWER AND WATER SEPARATION RIGHTS

SPPWC

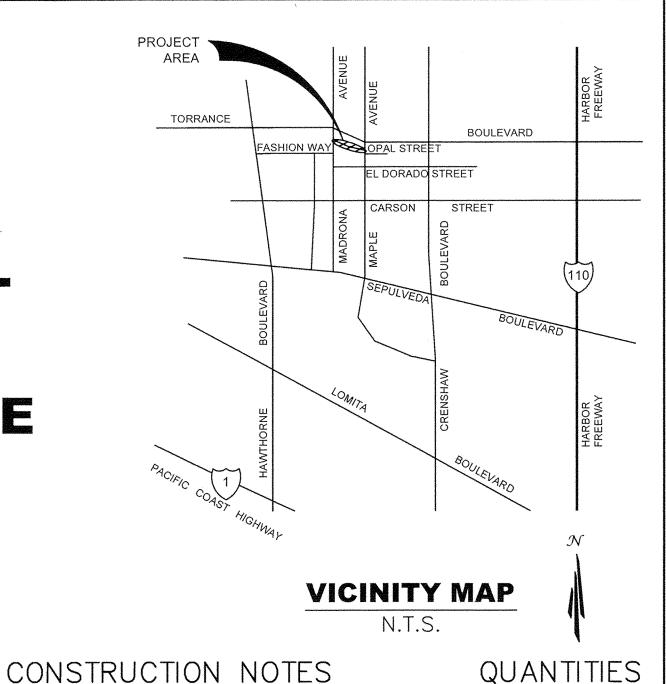
CURB RAMP CURB AND GUTTER

BREAKING INTO EXISTING MANHOLES BREAKING INTO EXISTING MANHOLES

REFERENCE

SS-377 SEWER PLAN SS-3013 SEWER PLAN





1,950 LF

1 EA

1 EA

440 LF

24 EA

9,150 SF

<u> </u>	MSTRUCTION NOTES
\widehat{A}	REMOVE INTERFERING PORTIONS OF PIPE AND MANHOLE.
\checkmark	CONSTRUCT 15" EXTRA STRENGTH VCP SEWER PIPE. BEDI CITY OF TORRANCE STD. T204, TRENCHING AND PAVEMEN

REPAIR PER CITY OF TORRANCE STD. T116. 12 EA (2) CONSTRUCT SEWER MANHOLE PER SPPWC STD. 200 (60" DIA.). 120 LF CONSTRUCT 10" EXTRA STRENGTH VCP SEWER PIPE. BEDDING PER CITY OF TORRANCE STD. T204, TRENCHING AND PAVEMENT REPAIR PER CITY OF TORRANCE STD. T116. 1 EA

4 CONSTRUCT MANHOLE BASE AS PER SPPWC STD. 208, SEE DETAIL A. (5) PROTECT IN PLACE EXISTING IMPROVEMENT.

(6) PLUG SEWER FOR FUTURE CONNECTION. PROVIDE SEWER BY-PASS AND CONSTRUCT MANHOLE BASE PER DETAIL B.

CONSTRUCT 6" SEWER LATERAL PER CITY OF TORRANCE STD. T203 AND SPPWC STD. 222-2, TYPE C., TRENCHING AND PAVEMENT REPAIR PER CITY OF TORRANCE STD. T116. (9) INSTALL TERMINAL CLEANOUT PER SPPWC 204-2.

SLURRY SEAL OPAL STREET, ENTIRE STREET WIDTH FOLLOWING TRENCH REPAIR, REPAINT PAVEMENT MARKERS. 51,300 SF RECONSTRUCT RAMP PER SPPWC 111-5 CASE A TYPE 1. 1 EA 730 LF CONSTRUCT CURB AND GUTTER PER SPPWC STD. 120-2. 1 EA RECONSTRUCT RAMP PER SPPWC 111-5 CASE C.

REMOVE EXISTING AC PAVEMENT AND CONSTRUCT PCC SIDEWALK AND DRIVEWAY APPROACHES PER SPPWC STD. 110 (TYPE B) AND

ENGINEERS NOTE TO CONTRACTOR:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, PIPES, AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL ASCERTAIN THE TRUE VERTICAL AND HORIZONTAL LOCATION OF THOSE UNDERGROUND UTILITIES TO BE USED AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY PUBLIC OR PRIVATE UTILITIES, SHOWN OR NOT SHOWN HEREON. IF THE CONTRACTOR ENCOUNTERS ANY DISCRÉPANCIES, CONFLICTS OR AREAS WHICH HE FEELS UNWORKABLE, HE SHALL NOTIFY THE GRADING ENGINEER IMMEDIATELY PRIOR TO CONTINUING OR DEVIATING FROM THIS PLAN.

UNAUTHORIZED CHANGES & USES:

THE ENCINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS. CONSTRUCTION CONTRACTOR ACREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

COUNTY SANITATION DISTRICT No. 5 OF LOS ANGELES COUNTY, CALIFORNIA GRACE ROBINSON HYDE-CHIEF ENGINEER AND GENERAL MANAGER Timmed Timor OFFICE ENGINEER

			BENCH MARK		
destrontistication	QUAD. YEAR	ELEV. FOOT	DESCRIPTION	BM NUMBER	DATUM
	TORRANCE (2005)	97.315	DPW BM TAG IN E CB 2M(6.5 FT) S/O BCR @ SE COR FASHION WAY & HAWTHORNE BLVD	Y 10948	NAVD 198

CITY OF TORRANCE **PUBLIC WORKS DEPARTMENT**

CITY ENGINEER R.C.E. NO. 55339 (EXP. 12/31/2016) SCALE: AS SHOWN SHEET **SS-390** PLAN NO.

NO WORK SHALL BE DONE ON THIS SITE UNTIL BELOW AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE. Know what's below. Call before you dig.

TWO WORKING DAYS BEFORE YOU DIE

PLANS PREPARED BY: Since 1964



701 N. Parkcenter Drive Santa Ana, CA 92705 p: 714/560/8200 f: 714/560/8211 www.tait.com

Los Angeles Sacramento San Francisco Dallas Phoenix San Diego Boise

DATE BY CHECKED DESCRIPTION

REVISIONS

CARSON STREET

OPAL STREET SEWER PROJECT (MADRONA AVENUE BETWEEN FASHION WAY AND OPAL STREET AND OPAL STREET BETWEEN MADRONA AVENUE AND MAPLE AVENUE)

TITLE SHEET

PREPARED UNDER THE SUPERVISION OF TAIT & ASSOCIATES, INC. MICHAEL P. SILVEY RCE No. 58651

No.CO58651



PROJECT ENGINEER

1 of 5

1/5/2016